REMARKS

This Response is filed in response to an *Advisory Action*, mailed January 31, 2005. Applicant appreciates the Examiner participating in a telephonic interview with Applicant's representative.

In the final *Office Action* mailed August 30, 2004, claims 1-7 were rejected under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the written description requirement. Claims 1-7 were stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite. Claims 1-7 were also rejected under 35 U.S.C. § 101 as allegedly directed to non-statutory subject matter. Applicant respectfully traverses the Examiner's rejections.

Applicant has amended claim 1. No new matter was added by the amendment, and support for the amendment may be found in the specification and claims as filed.

Reconsideration of the claims is respectfully requested in light of the amendment above and remarks below.

I. Claims 1-7, § 112, First Paragraph

Claims 1-7 stand rejected under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the written description requirement. The Examiner states that Applicant does not appear to adequately define the claimed limitation "instance data" or an "instance." Examiner has asked that Applicant's representative restate the arguments presented during the recent telephonic interview in these formal remarks.

35 U.S.C. § 112 states, in part, "[t]he specification shall contain a written description of the invention...in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains...to make and use the same." Applicant has described the term "instance" in the specification so as to enable person of skill in the art to make and use the invention.

The term "instance" is well known in the computing field. The *Microsoft®*Computer Dictionary defines an instance as "[a]n object, in object-oriented programming, in relation to the class to which it belongs." *Microsoft® Computer*Dictionary, Fifth Edition, Microsoft Press, p. 276 (2002). The term instance variable is

defined as "[a] variable associated with an instance of a class (an object)." *Id.* Instantiate is defined as "[t]o create an instance of a class." *Id.* These definitions comport with the description found on page 23 of the application.

Further, the claim term "instance" is adequately supported in the Specification. For example, the definition of the claim term "instance" begins on page 22, "An instance comprises a data point, which represents a specific type of object that possesses certain characteristics or attributes," continues on page 23, and the term is used and supported throughout the specification. The description on page 23 includes the example that Applicant's representative referred to during the interview. "Taurus represents an instance of the Ford class."

The Office Action asserts that there are two definitions for the term "instance," and that "it is unclear as to how the two definitions connect." *See* Office Action, page 3. Specifically, "[t]he examiner notes page 4 lines 9-10 of the disclosure makes reference to **classifying data** (otherwise known as [an] **instance**) using a computer system; whereas on page 6 lines 12-13, the disclosure makes reference to *an instance* as being *data*." See Office Action, page 2 (emphasis in original).

The Applicant respectfully notes that the Office Action incorrectly reads "classifying" as an adjective rather than as a verb, as it is actually used, when citing page 4 lines 9-10. The full sentence in the disclosure reads: "[t]he present invention provides methods for classifying data (otherwise known as an instance) using a computer system." "[C]lassifying," read as a verb, is the action that is accomplished by the method, and "data" are the things being classified. Further, the parenthetical "(otherwise known as an instance)" refers instance that includes the instance variables i.e., those data that are being classified. The sentence conveys the notion that the present invention provides methods for classifying an instance, which can comprise more than one datum. This definition of "instance" is entirely consistent with the definition cited by the Examiner from page 6 lines 12-13 of the disclosure stating that an instance is data. Moreover, it is entirely consistent with the way "instance" is used throughout the specification.

The Examiner also states that "page 22 lines 14-16 of the disclosure states an 'overall classification mechanism comprises a computational server 135 first **receiving**

an instance to be classified (the instance comprising at least one attribute value and corresponding relevance value)'; while page 22 lines 24-26 describes an 'instance comprises a data point, which represents a specific type of object that possesses certain characteristics or attributes.'" See Office Action, page 3 (emphasis in original).

These statements are consistent with each other and with the definition of "instance" as explained above. An "instance" comprises data. Here, according to lines 14-16, the instance comprises "at least one attribute value and corresponding relevance value." The attribute value is one datum and the relevance value is another datum; both are contained in the instance described. And according to lines 24-26, "[a]n instance comprises a data point, which represents a specific type of object that possesses certain characteristics or attributes." In other words, each instance (singular) can represent an object (singular) by inheriting the object's characteristics (plural) or attributes (plural) as data (plural). The term "instance" is used and supported consistently in this manner throughout the specification.

Thus, the specification complies with the written description requirement, and Applicant respectfully requests that the Examiner withdraw the rejection of claim 1-7 under 35 U.S.C. § 112, first paragraph.

II. Claims 1-7, § 112, Second Paragraph

Claims 1-7 stand rejected under 35 U.S.C. § 112, second paragraph, as being allegedly indefinite. The Examiner states in the Office Action "[r]egarding claim 1, the following limitation is vague: 'classifying an instance' [note claim 1 line 1] and an instance [claim 1 line 2]." Claims 2-7 stand rejected on the basis of their dependency from claim 1.

As stated above, the present invention provides a method for classifying an instance, and an instance can comprise more than one datum. The specification supports and uses the term "instance" consistently in this manner. This usage of the term "instance" is clear in claim 1, which reads in full: "[a] method of classifying an instance comprising the steps of: receiving an instance to be classified, the instance to be classified comprising at least one attribute and corresponding relevance value;

determining a best host for the instance to be classified; and inserting the instance to be classified into a location relative to at least one child of the best host within a classification structure, the classification structure comprising at least one node, and the node comprising at least one attribute and corresponding relevance value" (emphasis added). The "instance" that is "to be classified" comprises 1) "at least one attribute" and 2) "corresponding relevance value." Therefore, the instance is a collection of data (plural). "Classification" is what is done to the instance; again, it is important to note that "classifying" is not used as an adjective of "data," but rather "classifying" is used as a verb to describe the action that is done to the data.

Applicant respectfully believes that once the Examiner notes that "classifying" is used as a verb, and not an adjective, in the text cited by the Examiner, then this and other rejections under section 112 will be readily removed.

The MPEP states that "[t]he essential inquiry pertaining to this [35 U.S.C. § 112, second paragraph] requirement is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity." M.P.E.P. § 2173.02. Respectfully, claim 1 sets out the subject matter claimed with a reasonable degree of clarity and particularity. Claims 2-7 depend from claim 1 and thereby also set out the subject matter claimed with a reasonable degree of clarity and particularity. Applicant respectfully requests that the Examiner withdraw the rejection of claim 1-7 under 35 U.S.C. § 112, second paragraph.

III. Claims 1-7, § 101

Claims 1-7 stand rejected under 35 U.S.C. § 101 as allegedly directed to non-statutory subject matter. The Examiner states, "...the claim does not define a useful machine or manufacture by identifying the physical structure of the machine or manufacture." See Office Action, page 5.

During a telephonic interview, the Examiner agreed that amending the preamble of claim 1 to include "computer-implemented" would overcome the rejection of claim 1 under 35 U.S.C. § 101. Applicant has amended the claim as the Examiner suggested. Applicant respectfully requests that the Examiner withdraw the rejection of claim 1.

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Claims 2-7 depend from claim 1 and are allowable for at least the same reasons as claim 1. Applicant respectfully requests that the Examiner withdraw the rejection of

claims 2-7.

IV. Conclusion

Applicants respectfully submit that claims 1-7 are allowable. A favorable Office

Action is respectfully solicited.

Should the Examiner have any comments, questions or suggestions of a nature

necessary to expedite the prosecution of the application, or to place the case in condition

for allowance, the Examiner is courteously requested to telephone the undersigned at the

number listed below.

Respectfully submitted,

Dated: May 4, 2005

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